

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 November 2004 (18.11.2004)

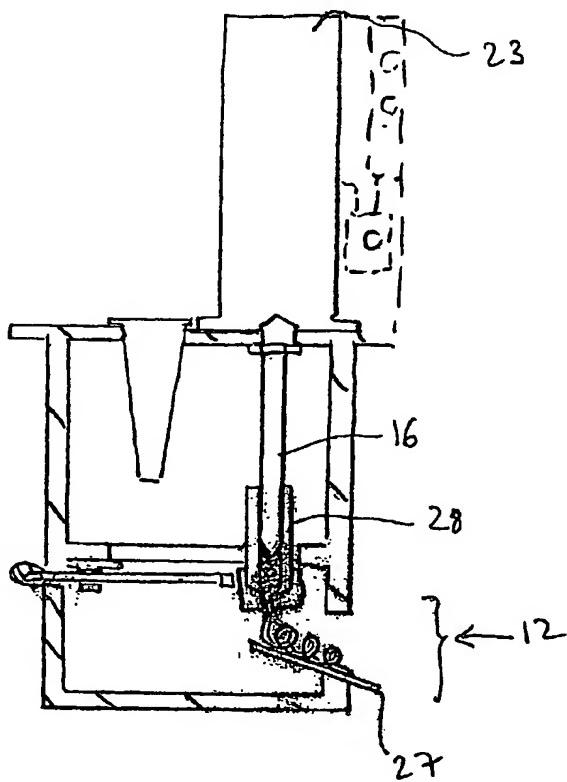
PCT

(10) International Publication Number
WO 2004/098304 A3

- (51) International Patent Classification⁷: A23G 1/20,
3/02, 3/12, 1/00
- (21) International Application Number:
PCT/EP2004/004833
- (22) International Filing Date: 6 May 2004 (06.05.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03010217.2 6 May 2003 (06.05.2003) EP
04007066.6 24 March 2004 (24.03.2004) EP
- (71) Applicant (for all designated States except US): NESTEC S.A. [CH/CH]; Avenue Nestlé 55, CH-1800 Vevey (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DAY, Arthur [GB/GB]; 3 The Walled Garden, Naburn Hall, Naburn, York YO19 4SB (GB). PARSONS, Nicholas, Tyers [GB/GB]; 23 St. Nicholas Road, Copmanthorpe, York
- YO23 3UX (GB). BECKETT, Stephen, Thomas [GB/GB]; 42 Walmer Carr, Wigginton, York Y032 2SX (GB). OVAICI, Hooman [GB/GB]; 219 Westgate Apartments, Leeman Road, York YO26 4ZF (GB).
- (74) Agent: BORNE, Patrice; Avenue Nestlé 55, CH-1800 Vevey (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: FRESHLY PREPARED EXTRUDED FAT-BASED CONFECTIONERY PRODUCT WITH TEMPORARY FLEXIBILITY HAVING ENHANCED MELT-IN-THE-MOUTH PROPERTIES AND METHOD OF DISPENSING THE SAME



(57) Abstract: A visually attractive, freshly prepared, fat based confectionery product formed of at least one elongated strand of extrudate of fat based confectionery material; the at least one strand being capable of being handled while exhibiting a temporary flexibility and the at least one strand being formed to a surface area-to-mass ratio that is higher than 8.0 cm² per gram unit with the at least one strand having a continuous total length that is more than 80 mm. The product can be produced freshly on demand by cold extrusion at food service outlets and can be associated with food or beverages. The product exhibits enhanced melting properties, high volume occupancy and play value.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ*
- *EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:

10 February 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/004833

A. CLASSIFICATION OF SUBJECT MATTER				
IPC 7	A23G1/20	A23G3/02	A23G3/12	A23G1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A23G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 775 446 A (NESTLE SA) 28 May 1997 (1997-05-28) cited in the application column 1, line 3 - column 4, line 13; figures 3-6	1-19
X	----- EP 0 603 467 A (NESTLE SA) 29 June 1994 (1994-06-29) cited in the application page 2, line 35 - page 3, line 50; examples 1,6,7	20
A	----- EP 0 820 701 A (NESTLE SA) 28 January 1998 (1998-01-28) column 2, line 14 - line 57	1-19
X	----- Y	20
Y	----- EP 0 820 701 A (NESTLE SA) 28 January 1998 (1998-01-28) column 2, line 14 - line 57	21,22
	----- -/-	21,22

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

6 December 2004

Date of mailing of the international search report

16. 12. 2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.
Fax: (+31-70) 340-3016

Authorized officer

Gaiser, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/004833

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 366 978 A (SCHOELLER LEBENSMITTEL) 9 May 1990 (1990-05-09) the whole document -----	1
A	EP 0 321 449 A (ROWNTREE MACKINTOSH PLC ;PA CONSULTING SERVICES (GB)) 21 June 1989 (1989-06-21) cited in the application column 2, line 55 - column 4, line 25 -----	1,6-11
A	DE 34 36 578 C (BOTTERBLOOM MILCH & EISKREM EG) 9 January 1986 (1986-01-09) column 2, line 27 - column 4, line 36 -----	1
A	EP 0 808 576 A (NESTLE SA) 26 November 1997 (1997-11-26) page 2, line 23 - page 3, line 34; figure 3; example 1 -----	1,15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2004/004833

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-19

a fat based product forming a continuous strand of a plurality of curls

2. claims: 15-31

On demand delivery of an extruded confectionery product

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2004/004833

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0775446	A	28-05-1997	AU 715269 B2 AU 7046496 A BR 9605391 A CA 2189266 A1 CN 1161151 A ,B CZ 9603189 A3 EP 0775446 A2 HU 9602999 A2 IN 181969 A1 JP 9163932 A NZ 299632 A RU 2141768 C1 SG 83090 A1 TR 970412 A2 US 5820912 A ZA 9609142 A	20-01-2000 08-05-1997 28-07-1998 01-05-1997 08-10-1997 14-05-1997 28-05-1997 28-08-1997 21-11-1998 24-06-1997 24-09-1998 27-11-1999 18-09-2001 21-05-1997 13-10-1998 30-04-1998
EP 0603467	A	29-06-1994	GB 2270828 A AT 144107 T AU 668202 B2 AU 4628093 A BR 9303944 A CA 2106554 A1 CN 1090719 A ,B CZ 9302032 A3 DE 69305483 D1 DE 69305483 T2 DK 603467 T3 EP 0603467 A2 ES 2096820 T3 HK 48697 A HU 67526 A2 IN 177900 A1 JP 2000050804 A JP 2997612 B2 JP 6189683 A MX 9305975 A1 NZ 248772 A SK 102393 A3 US 5439695 A US RE36937 E ZA 9306630 A	30-03-1994 15-11-1996 26-04-1996 14-04-1994 05-04-1994 30-03-1994 17-08-1994 15-12-1994 21-11-1996 20-02-1997 24-03-1997 29-06-1994 16-03-1997 25-04-1997 28-04-1995 22-02-1997 22-02-2000 11-01-2000 12-07-1994 31-01-1995 26-04-1996 08-06-1994 08-08-1995 31-10-2000 29-06-1994
EP 0820701	A	28-01-1998	GB 2315451 A AT 213592 T AU 710384 B2 AU 2877997 A BG 63525 B1 BG 101770 A BR 9704053 A CA 2209700 A1 CN 1179897 A ,B CZ 9702350 A3 DE 69710651 D1 DE 69710651 T2 DK 820701 T3 EP 0820701 A2 ES 2171782 T3	04-02-1998 15-03-2002 16-09-1999 29-01-1998 30-04-2002 27-02-1998 17-11-1998 23-01-1998 29-04-1998 18-02-1998 04-04-2002 14-11-2002 27-05-2002 28-01-1998 16-09-2002

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004833

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0820701	A		HU 9701173 A2 IL 121282 A IN 183349 A1 JP 10066509 A NO 973377 A NZ 328336 A PL 321205 A1 PT 820701 T RU 2182434 C2 SG 55344 A1 SK 100097 A3 TW 380041 B US 5895683 A ZA 9706080 A	30-03-1998 01-06-2000 27-11-1999 10-03-1998 26-01-1998 27-04-1998 02-02-1998 31-07-2002 20-05-2002 21-12-1998 04-02-1998 21-01-2000 20-04-1999 08-01-1999
EP 0366978	A	09-05-1990	DE 3834461 A1 AT 108617 T CA 2000387 A1 DD 285547 A5 DK 498289 A EP 0366978 A2 ES 2057047 T3 FI 894779 A ,B, IE 64832 B1 JP 2200150 A NO 894025 A ,B, US 5000969 A	12-04-1990 15-08-1994 10-04-1990 19-12-1990 11-04-1990 09-05-1990 16-10-1994 11-04-1990 06-09-1995 08-08-1990 11-04-1990 19-03-1991
EP 0321449	A	21-06-1989	AT 76563 T AU 620565 B2 AU 2335188 A CA 1331308 C DE 3871509 D1 DK 547688 A EP 0321449 A2 ES 2032612 T3 FI 884516 A ,B, GR 3004748 T3 IE 60951 B1 JP 1153045 A JP 2580017 B2 NO 884343 A ,B, NZ 226405 A PT 88654 A ,B US 5126157 A US 5129315 A ZA 8807401 A	15-06-1992 20-02-1992 06-04-1989 09-08-1994 02-07-1992 03-04-1989 21-06-1989 16-02-1993 03-04-1989 28-04-1993 07-09-1994 15-06-1989 12-02-1997 03-04-1989 25-09-1991 31-07-1989 30-06-1992 14-07-1992 30-05-1990
DE 3436578	C	09-01-1986	DE 3436578 C1	09-01-1986
EP 0808576	A	26-11-1997	EP 0808576 A1 AU 726780 B2 AU 2353797 A BR 9703294 A CA 2206900 A1 CN 1171895 A ,B EG 20934 A IL 120871 A	26-11-1997 23-11-2000 27-11-1997 15-09-1998 21-11-1997 04-02-1998 28-06-2000 31-08-2000

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004833

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 0808576	A	JP	10042791 A	17-02-1998